fore, even if an insect were strong enough to push open the perianth tube when reaching for the nectar, which I doubt, stamens and pistils could never come in contact with its body. To insects which might be interested in eating or collecting pollen, access is made about as difficult as possible: on the under-surface of the long and very flexible tube. Moreover, though the outside of the perianth is rough and hairy, its inside is remarkably smooth, presumably making a foothold for insects even more precarious.

Though I know of no other indigenous flower which uses back-pollination, it is quite likely that it occurs elsewhere. In this connection *Hibiscus* comes to mind, where there is also a great distance between nectar and pistils, but the structure is entirely different. Unfortunately in Western Australia I have never seen birds play any role in pollination of *Hibiscus*. Admittedly the flowers are frequently visited by honeyeaters, notably the Brown Honeyeater, *Lichmera indistincta*, but they appear invariably to reach for the nectar from outside, pushing their bills between calyx and corolla.

The few simple observations on the Kangaroo Paw recorded here have, of course, not nearly cleared up all the problems surrounding the pollination of this remarkable plant. For example, the Spinebill is doubtless its most important pollinator, but Silvereyes have been recorded, and there may well be others. It would be interesting to study the relative importance of other pollinators. How do the ranges of *Anigozanthos manglesii* and *Acanthorhynchus superciliosus*, both endemics of South-Western Australia, compare; and, if the former occurs anywhere outside the range of the latter, which bird takes its place as chief pollinator? Is there a difference in time of ripening between stamens and pistils in the Kangaroo Paw, or some other device to prevent self-pollination, and how successful actually is the plant at producing seed and at dispersal by seed?

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MIST-NETTING AND RINGING THE NOISY SCRUB-BIRD

By D. L. SERVENTY, Nedlands.

Early in 1964 arrangements were finalised by Mr. Graham Pizzey, of Melbourne, with the Australian Broadcasting Commission and the Fisheries & Fauna Department of Western Australia, to mist-net the Noisy Scrub-bird *(Atrichornis clamosus)* for a nature documentary film to be released for the national television network. Accordingly, on January 5, 1964, a party of naturalists travelled to Albany to conduct the operation. These included Messrs. H. B. Shugg (Fauna Officer of the Fisheries & Fauna Department), R. H. Stranger, V. N. Serventy and myself. At Two People Bay, east of Albany, we joined Mr. Pizzey, who with Mr. H. O. Webster, had cleared a narrow lane in one of the Scrub-bird territories in a thicket on the slopes of Mt. Gardner.

Ringing of the Noisy Scrub-bird.
—Photo D. L. Serventy

Within this, a mist-net was to be set up. Mr. and Mrs. Erickson, then holidaying at Albany, also joined the field party.

Shortly after lunch Mr. Stranger had two lines of net rigged up and the various members of the party set out to operate a concerted series of drives, leaving a watch at the nets. Four field telephones kept everyone in communication. We had hardly dispersed before a Bristle-bird *(Dasyornis brachypterus)* was caught. This was put in a holding cage for later examination.

Shortly afterwards, at 1.50 p.m., we were called to the nets again and to our delight found a Noisy Scrub-bird running along the foot of the net. Mr. Stranger was able to catch it before it could escape. Still and movie photographs were taken of it and of the whole operation. These were broadcast over A.B.C. Channel 2 in Australia and in Great Britain by the B.B.C., in Peter Scott's programme, during 1966. Mr. Pizzey described the episode in *Animals* (London), 5 (6), November 17, 1964:151-155; and Mr. V. N. Serventy in *Walkabout* (Melbourne), 30(11), November 1964: 37-39, and in television programmes (Channel 9) in Sydney, Melbourne and Adelaide.

The following description was taken of the Scrub-bird. Plumage: upper parts and upper wing coverts brown, finely barred black; breast, greyish white: abdomen and flanks, bright orange-brown; wing quills, brown; tail, similar brown with wavy black bars. There was no sign of any dark colouring on the breast. Bare parts: iris, dark brown; skin around eye, greyish; beak, dark brown, lower mandible much paler, light brown; legs, brown; inside of mouth, flesh colour. Measurements: Length in the flesh, 245 mm.; weight, 55.9 gm.: wing, 81 mm.; beak (to feathering), 19 mm.; tail, 106 mm.; tarsus, 27.5 mm.; middle toe and claw, 27 mm. The tarsus was scutellate in front and reticulate behind. Soles, pale brown, with small granulations. The claws were sharp, not blunted, with no signs of wear. Mr. Stranger noted down the following moult details: inner 5 primaries new, 6th ½- grown; outer 4 primaries old. Secondaries were in moult,

as were the head feathers and there was slight moult of the abdomen. The tail quills appeared worn. We remarked on the long hind claws and the strong muscular thighs.

The lack of black on the breast, and the colour of the inside of the mouth (in singing males the inside of the mouth is yellow) suggests the individual was either a female or immature.

The bird remained quiet throughout the period it was in the holding cage and whilst being handled. It made no attempt to bite or grasp one's hand with its claws. It was quite silent and we never at any time heard it utter a sound of any kind. It showed no sign of distress. This docility and tameness was in sharp contrast with the behaviour of the Bristle-bird, which struggled and squeaked whilst it was held in the hand and attempted to bite the fingers.

The Scrub-bird was ringed with a C.S.I.R.O. ring (050-03501) on one leg and a yellow plastic ring on the other. At 5 p.m., i.e. after being just over 3 hours in captivity, it was released with two movie cameras trained on it. It darted rapidly into the bushes with a "mouse-like" movement and the tail held parallel to the ground. A study of the film afterwards revealed that it bounded "with both legs together" (G. Pizzey, *in litt.*).

The Bristle-bird was also ringed and released. Description: Three very strong bristles in front of the eye on either side. Iris, light brown; beak, black, lower mandible pale grey; legs, pale blue-grey; inside of mouth, pale yellow behind, grey flesh in front. Measurements: Length in the flesh, 199 mm.; weight, 30.0 gm,; wing, 64 mm. The tarsus was scutellate in front and booted behind. Soles, buffy-grey. The black claws were sharp. No moult was evident in the wings but the middle tail feathers were half-grown.

NESTING OF FAIRY TERNS AND SILVER GULLS AT WALYUNGUP LAKE, WESTERN AUSTRALIA

By JULIAN FORD, Perth.

Walyungup Lake lies on the Swan coastal plain about two miles from the coast near Safety Bay. It covers an area of about 734 acres when full, is of low salinity, and has a bottom of gypsum overlying sand and limestone. During the dry summer period much of the lake evaporates, exposing the hard flat bottom of gypsum, except for two expansive deep areas near the centre and south end of the lake. For the past several years the gypsum has been exploited for the construction of road foundations, it being first bulldozed into large mounds where the lake has dried out before being removed. With the rise in the water level in winter, these gypsum piles are transformed into small islands separated by several chains from the shoreline by water up to three feet deep, and remain as such until January by which time the shallow areas have again evaporated.

From about 1958 onwards, these islands have been utilised as breeding sites by the Fairy Tern *(Sterna nereis)* and Silver Gull *(Larus novachollandiae)*. Observations on the nesting of these species form the basis of this contribution.

FAIRY TERN

BREEDING

It was first discovered that Fairy Terns nested on the gypsum islets in Walyungup Lake on February 15, 1958, when P. S. Stone and I saw four nuptial-plumaged adults with three mottled-plumaged juveniles, two of which were barely capable of flying (see